



### **Iago sparrows *Passer iagoensis* take a ride to Europe**

On 6 May 2013, M/V *Plancius* – on its way from Antarctica to Europe – stayed off Raso islet. Aboard was an international party of avid bird watchers, hoping to get a glimpse of the Raso lark *Alauda razae*. During the course of the day, it was noticed that a group of about 20 Iago sparrows *Passer iagoensis* had landed on the ship and appeared to be intend of staying there. These sparrows, which are common residents on Raso, are renowned for their confiding nature, often even landing on people's head and other body parts, especially when fresh water is provided. As night fell and the ship was leaving Capeverdean waters, at least eight sparrows were still on board. The next day, while nearing Mauritania, a total of 11 Iago sparrows were counted. They were now regularly offered food and water, which they readily accepted. Meanwhile, the ship had entered an area with strong winds and only eight sparrows were counted on 9 May. However, the next day, while passing through the Canary Islands, 11 sparrows were found alive and kicking. Curiously, with the island of Gomera within close sight, they did not attempt to leave the ship. Again, while the ship moored off Salvagem Grande on 11 May, the sparrows preferred to stay on board and the same happened while it stayed off Deserta Grande (Madeira). However, the next day, 13 May, only six sparrows could be found aboard ship and it appeared that five of them had chosen to stay on Deserta Grande. During a stop at the harbour of Funchal, Madeira, the sparrows seemed tempted to leave the ship, but in the end preferred to stay aboard. When the *Plancius* finally arrived at Reimerswaal, province of Zeeland, the Netherlands, on 19 May, there were still four Iago sparrows (two males, two females) on board. At the time of writing (21 May), it appears that none of them has as yet left the ship, although some were seen visiting adjacent ships as well as the quay. This must be the first documented occasion on which a Capeverdean endemic bird has left its homeground voluntarily (earlier cases of ship-assisted passage may, of course, have gone unnoticed). We will try and follow the fate of the four birds now in the Netherlands. With thanks to Nils van Duivendijk for providing details of the story.

### **Whale stranding on Maio in May 2013: first confirmed record of Gervais' beaked whale *Mesoplodon europaeus* in the Cape Verde Islands**

On 15 May 2013, on the beach near Calheta de Baixo, Maio island, the remains of a stranded cetacean were found. The shape of the skull made it immediately clear that it concerned a beaked whale *Mesoplodon*. The single pair of teeth placed back from the apex in the lower jaw allowed

the animal to be identified as a male Gervais' beaked whale *M. europaeus*. This is the first confirmed record of Gervais' beaked whale for the Cape Verde Islands, as well as the first registered stranding of a beaked whale in the archipelago. Four beaked whales observed and photographed off Sal in February 2010 were only tentatively identified as *Mesoplodon* cf. *europaeus*, because none of the pictures clearly showed the diagnostic beak [see *Zoologia Caboverdiana* 1 (2): 82, 2010]. A full account of the Maio stranding will be published in *Zoologia Caboverdiana* in due course.

### **MDR descobre três focos de mil pés no Sal**

Foram descobertos três focos de mil pés em residências particulares na cidade de Espargos, ilha do Sal. Uma equipa do Ministério do Desenvolvimento Rural está no terreno para proceder à eliminação da praga. Os três focos foram descobertos em residências nos bairros de Hortelã e Ribeira Funda, na cidade de Espargos. Supõe-se que a praga já existe na ilha do Sal há cerca de quatro anos. No ano passado o MDR tomou conhecimento da existência de mil pés na ilha e decidiu enviar da cidade da Praia uma equipa para identificar os focos e agora regressa para avançar com a eliminação dos mesmos. Nas residências afectadas, todas as plantas serão arrancadas, ensacadas e posteriormente destruídas, junto com a terra onde foram cultivadas, através de incineração numa vala já preparada para o efeito na zona da Palmeira. Um procedimento para impedir que a praga se alastre. Até este momento, o MDR não dispõe de informação se existem ou não outros jardins na ilha do Sal infestados pelos mil pés.

[A Semana online](#), 23 de Abril de 2013

[SCVZ EDITOR'S NOTE: This appears to be the first occurrence of the millipede *Spinotarsus caboverdus* Pierrard, 1987 outside the islands of Santo Antão and São Vicente. Described and named after specimens from Santo Antão, where it is an important agricultural pest and causes serious damage to potato and other crops, the species was probably inadvertently introduced from continental Africa during the late 1960s or early 1970s. Its original geographical provenance remains as yet to be established.]

### **Nova praga detectada na agricultura em Porto Novo**

Os agricultores do concelho de Porto Novo estão a braços com uma nova praga denominada “*Apatés* [sic] *monachus*”, vulgarmente conhecida por “broca de madeira”, detectada há alguns meses e que está a espalhar-se por vários povoados do interior, devastando plantas e cultivos de batata comum.

Feijoal, mangueira, “Neem ou Mót Cuxim” e madeira são alguns dos atractivos para a praga. No entanto, há relatos de que o bicho ataca também as sementeiras de batata comum, facto que levou alguns agricultores da localidade de Jorge Luís a abdicar desse cultivo este ano. Cursino Pereira, agricultor na localidade de Martiene, diz que os seus colegas desconhecem a origem da

praga, mas alerta que ela é “tão devastadora” que quando invade os campos, dificilmente as plantas atingidas sobrevivem. Todas as plantas ou madeira invadidas pelo bicho ficam perfuradas, daí a origem da alcunha “broca de madeira”.

Outros agricultores contactados pelo *asemanaonline* confirmaram a presença da “broca de madeira” em outros povoados do concelho e estranham que as autoridades competentes tenham proibido a saída dos produtos agrícolas da ilha por mais de 20 anos e não fazem o mesmo com os “rabidantes” que diariamente entram hortaliças e legumes de outras paragens em Santo Antão, sem qualquer controlo.

“Diariamente chegam à Santo Antão pessoas com produtos agrícolas alegando que são oriundos de Ribeira de Vinha e outras localidades de São Vicente, numa pura concorrência interna com os nossos produtos”, lamenta um agricultor sob anonimato que presume que a produção pode ter origem em São Nicolau ou Santiago. É que alega o nosso interlocutor, São Vicente não tem produção suficiente para abastecer o seu mercado e enviar excedente para uma ilha agrícola como Santo Antão. Para este agricultor de Santo Antão, enquanto a ilha é obrigada a garantir através do Centro de Expurgo que a produção é “limpa”, continua a receber novas pragas de outras paragens, ironiza.

A delegação do Ministério de Desenvolvimento Rural (MDR) em Porto Novo, através do técnico do departamento de extensão rural, Manuel Delgado, garante que a instituição agiu de imediato em finais de 2012, logo que tomou conhecimento dessa praga - detectada em Ribeira Fria e posteriormente em Manuel Lopes. Aquele responsável lamenta, por outro lado, que a praga esteja a alastrar-se por várias localidades do interior, quando os agricultores foram aconselhados a tomar medidas locais que poderiam minimizar o seu alastramento. Ao *asemanaonline*, Manuel Delgado apresentou uma nota posta a circular junto dos agricultores, em Novembro do ano passado, com conselhos que podem diminuir a passagem do bicho para outras comunidades agrícolas, nomeadamente: Retirar e queimar as plantas atingidas – utilizar a lenha já seca para confeccionar os alimentos de modo a eliminar as larvas, ou então, fazer pesquisas para a detecção e destruição dos ovos que são depositados no terreno, uma ou mais vezes por mês.

[A Semana online](#), 3 de Maio de 2013

[SCVZ EDITOR’S NOTE: The black borer *Apate monachus* Fabricius, 1775 is a bostrichid beetle harmful to ornamental and fruit trees and other woody plants. It is known from Africa and some Mediterranean countries and has been introduced to the Caribbean and South America. Damage results from tunneling in the trunk and branches and is usually most severe in young plantations and nursery trees. Larvae live in the wood of dead trees and do not usually cause economic damage. The species is known to invest grapevine, peach, apple, pear, avocado, coffee, and other ornamental and fruit trees. However, it is not known to live on potato (*batata comum*) and the report in *A Semana* to that effect is almost certainly due to an identification error. Damage to potato crops in Santo Antão is more likely to be caused by larvae of the turnip moth *Agrotis segetum* Denis & Schiffermüller, 1775 or by the infamous millipede *Spinotarsus caboverdus* Pierrard, 1987.]

**Density, nest site characteristics and breeding rates of the osprey (*Pandion haliaetus*) in the southern limit of its range in the Western Palearctic (Boa Vista, Cape Verde Islands).** Manuel Siverio, Pedro López-Suárez, Felipe Siverio, Beneharo Rodríguez, Nuria Varo-Cruz & Luis F. López-Jurado, **2013**, African Journal of Ecology; <http://dx.doi.org/10.1111/aje.12082>

**ABSTRACT** Between 2004 and 2007, we studied density, habitat features and breeding parameters of the osprey (*Pandion haliaetus*) population in Boa Vista Island (Cape Verde). A total of 79 nest structures were identified, 37 of which were occupied for at least 1 year during the study period. The osprey population ranged between 14 and 18 pairs, and the mean density and distance between neighbouring occupied nests were 2.58 pairs per 100 km<sup>2</sup> and 3089 m, respectively. Occupied nests were found to be significantly further from the coastline and roads than unoccupied nests, but the distances from villages were similar. The majority (81.1%) of the 37 occupied nests were easily accessible to humans. Mean clutch size was 2.59, average productivity was 0.72 young/active nest, and breeding success was 58.8%. Density in Boa Vista was higher than that in other sedentary island populations in the Western Palearctic, whereas the productivity was the lowest of this region. Clutch size did not vary among Western Palearctic populations, but the differences observed in productivity were likely influenced by local factors that in Boa Vista are attributed to nest depredation by the brown-necked raven (*Corvus ruficollis*) and to direct human persecution.

**Genetic architecture of skin and eye color in an African-European admixed population.** Sandra Beleza & 15 other authors, **2013**, PLoS Genetics 9 (3): e1003372 (15 pages); <http://dx.doi.org/10.1371/journal.pgen.1003372>

**ABSTRACT** Variation in human skin and eye color is substantial and especially apparent in admixed populations, yet the underlying genetic architecture is poorly understood because most genome-wide studies are based on individuals of European ancestry. We study pigimentary variation in 699 individuals from Cape Verde, where extensive West African/European admixture has given rise to a broad range in trait values and genomic ancestry proportions. We develop and apply a new approach for measuring eye color, and identify two major loci (*HERC2*[*OCA2*]  $P = 2.3 \times 10^{-62}$ , *SLC24A5*  $P = 9.6 \times 10^{-9}$ ) that account for both blue versus brown eye color and varying intensities of brown eye color. We identify four major loci (*SLC24A5*  $P = 5.4 \times 10^{-27}$ , *TYR*  $P = 1.1 \times 10^{-9}$ , *APBA2*[*OCA2*]  $P = 1.5 \times 10^{-8}$ , *SLC45A2*  $P = 6 \times 10^{-9}$ ) for skin color that together account for 35% of the total variance, but the genetic component with the largest effect (~44%) is average genomic ancestry. Our results suggest that adjacent cis-acting regulatory loci for *OCA2* explain the relationship between skin and eye color, and point to an underlying genetic architecture in which several genes of moderate effect act together with many genes of small effect to explain ~70% of the estimated heritability.

**Cleaning mutualism in Santa Luzia (Cape Verde archipelago) and São Tomé islands, Tropical Eastern Atlantic.** J.P. Quimbayo, S.R. Floeter, R. Noguchi, C.A. Rangel, J.L. Gasparini, C.L.S. Sampaio, C.E.L. Ferreira & L.A. Rocha, **2012**, Marine Biodiversity Records Vol. 5, e118 (7 pages); <http://dx.doi.org/10.1017/S175526721200108X>

**ABSTRACT** This work reports for the first time cleaning activity by fish and shrimps in Santa Luzia, Cape Verde archipelago and São Tomé islands. Three new records of facultative cleaner fish species are presented. Facultative cleaners dominated by Labridae were the most observed cleaner fishes in the two studied islands. Multi-specific cleaning stations were prevalent in Santa Luzia, while cleaner shrimps were more observed interacting in the São Tomé islands.

**The deep-sea fish *Kali macrodon*: a new record for the tropical Atlantic off Cape Verde.**

Rui Pedro Vieira, Ralf Thiel, Bernd Christiansen, Rui Coelho, Anneke Denda & Jorge Manuel dos Santos Gonçalves, **2013**, Marine Biodiversity Records Vol. 6, e4 (3 pages); <http://dx.doi.org/10.1017/S1755267212001248>

**ABSTRACT** A new deep-sea fish is reported for the tropical eastern Atlantic. The rare chiasmodontid *Kali macrodon* was caught for the first time in Cape Verdean waters during an oceanographic survey in September 2009. This record provides the fifth occurrence for the species in the north-eastern Atlantic and represents the third specimen ever caught in tropical waters.

**A new species of *Diadema* (Echinodermata: Echinoidea: Diadematidae) from the eastern Atlantic Ocean and a neotype designation of *Diadema antillarum* (Philippi, 1845).** Adriana Rodríguez, José Carlos Hernández, Sabrina Clemente & Simon Edward Coppard, **2013**, Zootaxa 3636 (1): 144-170; <http://dx.doi.org/10.11646/zootaxa.3636.1.6>

**ABSTRACT** *Diadema africanum* sp. nov. Rodríguez *et al.* 2013 occurs in the eastern Atlantic Ocean at depths of 1-8 metres off Madeira, Salvage, Canary, Cape Verde and São Tomé islands and at the continental coast off Senegal and Ghana. This species was previously considered an eastern Atlantic population of *D. antillarum*. Genetic distances between the holotype of *D. africanum* and the neotype of *D. antillarum* herein designated, measured 3.34% in cytochrome oxidase I, 3.80% in ATPase-8 and 2.31% in ATPase-6. Such divergence is similar to that already highlighted between other accepted species of *Diadema*. Morphometric analysis of test, spine and pedicellaria characters also separated *D. africanum* from *D. antillarum* and reveals that this new species is morphologically similar to *D. antillarum ascensionis* from the mid Atlantic. The tridentate pedicellaria, which have been shown to have diagnostic characters which discriminate among species of *Diadema*, occur as both broad and narrow valved forms in *D. antillarum* from the western Atlantic. In *D. africanum* the tridentate pedicellaria occur only as a single form which is characterized by moderately broad and curved valves, with an expanded distal gripping region. This form of tridentate pedicellaria is very similar to that of *D. antillarum ascensionis* from the central Atlantic, with only slight variations in valve serration and valve curvature differentiating the two forms.

**Ecological and biogeographic implications of *Siderastrea* symbiotic relationship with *Symbiodinium* sp. C46 in Sal Island (Cape Verde, East Atlantic Ocean).** João G. Monteiro, Cristiane F. Costa, Krystyna Gorlach-Lira, William K. Fitt, Sergio S. Stefanni, Roberto Sassi, Ricardo S. Santos & Todd C. LaJeunesse, **2013**, *Marine Biodiversity*; <http://dx.doi.org/10.1007/s12526-013-0153-8>

**ABSTRACT** The relative abundance of the genus *Siderastrea* and its relationship with temperature and irradiance was assessed around Sal Island (Cape Verde). In some of the surveyed sites, these corals accounted for 80–90 % of the living cover, making it a biotope-dominant organism. Unlike *Siderastrea* corals from West Atlantic and Caribbean locations, genetic analyses of the dinoflagellate symbiotic partner revealed high specificity between *Siderastrea* sp. in Cape Verde and the *Symbiodinium* type C46. Biotope restriction of the ecological success of *Siderastrea* in Cape Verde may be explained in part by this host–symbiont partnership, resulting locally in a small optimum ecological niche with specific light intensity regimes. Distinctively, West Atlantic and Caribbean *Siderastrea* associates with a much broader range of *Symbiodinium* diversity, suggesting that these symbioses exhibit some flexibility under differing environmental conditions where these corals occupy a wider range of ecological niches. Geographic isolation and/or long-standing environmental conditions are probably responsible for such adaptations and coral–dinoflagellate symbioses. Additional genetic analyses on Clade C *Symbiodinium* associated with *Siderastrea* were conducted with the hyper-variable plastid psbA minicircle to resolve phylogeographic patterns that indicate the relative connectivity and/or isolation of these symbionts throughout the tropical Atlantic.

**Rhodoliths, uniformitarianism, and Darwin: Pleistocene and Recent carbonate deposits in the Cape Verde and Canary archipelagos.** Markes E. Johnson, B. Gudveig Baarli, Mário Cachão, Carlos M. da Silva, Jorge Ledesma-Vásquez, Eduardo J. Mayoral, Ricardo S. Ramalho & Ana Santos, **2012**, *Palaeogeography, Palaeoclimatology, Palaeoecology* 329-330: 89-100; <http://dx.doi.org/10.1016/j.palaeo.2012.02.019>

**ABSTRACT** Visiting “St. Jago” (Santiago) in the Cape Verde Islands in 1832 and again in 1836 aboard HMS Beagle, Charles Darwin was the first to trace and describe the tri-part sequence of white limestone and sandstone beds stratigraphically located between two levels of basalt exposed almost uninterrupted for 10 km along coastal cliffs. The Pleistocene carbonate sediments dominated by rhodoliths and rhodolith debris accumulated on a basalt shelf and subsequently became buried by subaerial and submarine basalt on the southeast coastline of Santiago. The main goal of this contribution is to re-examine Darwin's stratigraphic sequence. The secondary goal is to provide a general taphonomical model based on the observation of Recent rhodolith deposits for evaluation of fossil rhodolith assemblages. Environmental uniformitarianism is employed to understand the depositional history of the southern Santiago rhodolith-bearing strata. The mixed clastic-carbonate sequence includes a basalt-derived basal conglomerate with an intertidal to shallow subtidal fossil assemblage mainly denoted by limpets and oysters. Upper layers typically demonstrate swaley and hummocky cross stratification incorporating rhodolith debris further modified by bioturbation. Pillow basalts from 10 to 18 m in thickness succeeded by subaerial flows imply swift burial of the carbonate succession under equivalent water depths. The calcareous nannofossil assemblage was investigated to more precisely date the deposits. Darwin's paleoshore

is reinterpreted to represent two different transgressions occurring between approximately 1.1 and 0.7 Ma. Taphonomic grades from whole rhodoliths to finely crushed rhodolith debris observed under present-day conditions on Maio (Cape Verde Islands) and Fuerteventura (Canary Islands) were used to model rhodolith preservation and to constrain the depositional settings to which rhodoliths may be transported from the offshore banks where they naturally thrive. Coastward transport of rhodoliths commonly ends with deposition in subtidal storm beds, tidal pools, and platform over-wash deposits, as well as beach, berm, hurricane, tsunami, and coastal dune deposits.

[SCVZ EDITOR'S NOTE: Although rhodoliths (red algae) are the main subject of this study, it also includes data on fossil corals, molluscs, crustaceans and echinoderms.]

**What Darwin did not see: Pleistocene fossil assemblages on a high-energy coast at Ponta das Bicudas, Santiago, Cape Verde Islands.** B. Gudveig Baarli, Ana G. Santos, Eduardo J. Mayoral, Jorge Ledesma-Vásquez, Markes E. Johnson, Carlos M. da Silva & Mário Cachão, **2013**, *Geological Magazine* 150 (1): 183-189; <http://dx.doi.org/10.1017/S001675681200074X>

**ABSTRACT** Two distinct Pleistocene assemblages from SE Santiago Island are comparable to modern analogues elsewhere in the Cape Verde Islands. A low-diversity *Siderastrea radians* assemblage lived atop basalt knobs surrounded by sand on a slope below a cliff. A *Millepora alcicornis*–*Megabalanus azoricus* assemblage occupied the cliff. The latter was a typical rocky-shore assemblage from a high-energy setting below the tidal zone. Bioerosion structures in basalt produced by *Circolites kotoncensis* and *Gastrochaenolites* isp. also occur there. Despite extensive studies on local limestone deposits in 1832 and 1836, lack of exposure prevented Darwin from seeing these fossils.